

June 11<sup>th</sup> 2006

**SENT VIA E-MAIL ONLY**

California Energy Commission  
Steve Monroe  
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Regarding: **Opposition for Petition for Revision/Administrative Changes to  
Soil & Water - 4  
Commission Decision (97-AFC-1c)  
High Desert Power Project**

Dear Commission Members and Mr. Monroe

I am disheartened by the position of the CEC Staff in relation to modifying the conditions of approval for the High Desert Power Project (HDPP). I am requesting the ability to participate in the workshop by phone on June 16<sup>th</sup> 2006, as I am currently working in Colorado and will not be able to attend this workshop.

By way of background, the topic of soil and water, was in the commission's own words, ". . . the most highly contested area in the HDPP proceedings." The work that myself and other did to get conditions in place that would mandate a certain level of performance is now being ignored. In fact the staff fails to even recognize the work we did. And most notably, I raised the water quality issue in 2002 when I filed a complaint that HDPP was not proceeding under the conditions of approval, i.e. failing to install the R/O process. The current proposal by HDPP and your staff suggests that the CEC will not enforce the condition of a water bank by year five, when HDPP said they could do it in three years and that R/O will only be required if the bank is not in place by year 15.

The HDPP Petition amplifies that they are not complying with the Energy Commission's conditions of approval; they are attempting to get permission to amend the conditions for "reasons" that do not conform to the findings of the Commission. There is no discussion as why no water at all was banked in year two.

During hearings on the HDPP's Application for Certification a key environmental question/dilemma was how to prevent a negative impact to our area's water quality. The water treatment plant proposed by HDPP/Bookman/Edmonson and submitted into evidence as the plant that would be

necessary to provide treated water to background levels was an R/O plant. The plant initially approved by the CEC staff was an R/O plant. Eventually the HDPP stated that they wanted to use an UV plant, as it could treat more water less expensively. We disagreed, but the Commission, nonetheless approved the UV method. Clearly that method does not work. I am informed and believe there are many other in field problems with the injection water such as acidity and fouling of impellers in the injection wells. Many of these issues were discussed in testimony at the hearings and dismissed as speculative on our part.

The reason HDPP wants to change water treatment methods is clearly MONEY. It costs more money to treat water with the R/O process [and perhaps other additional processes to meet the total standards] than with other methods. (Dry cooling would have been cheaper for HDPP, but the applicant chose instead to use water) In order to use water from the state water project and NOT have a negative environmental impact, HDPP agreed to licensing conditions and the R/O method to treat and store water.

So, not only did HDPP agree to use R/O as a condition of certification, the applicants own counsel used the words “Res Adjudicata”, in the hearing on my contentions that the applicant was not complying with the conditions of approval by not building the R/O plant.

Many other water quality/environmental impact questions need to be answered, such as “dissipation”. HDPP says .5% last year, since they had a -2.3 AF injection for the year – that seems an interesting assumption. What if a full 13,000 AF was in the “Mound”, would that not mean that the dissipation rate would be a full 5% or 650 AF of make-up water per year to maintain the “Bank”? Would that not be a positive benefit to the Basin?

Another question: what is actually happening to the well field? What was the static level and water quality at the start and what are they now?

In addition to negative environmental impacts to soil and water, during the HDPP hearings I raised the environmental problem that HDPP would create negative “Growth Inducing Impacts.” We told the commission that another Power Plant had been planned on the same site. Although my evidence was denied, that Plant is now shown on the Commission’s web site as “City of Victorville Hybrid (500 MW gas, 50 MW Solar), 12 month AFC – scheduled for formal application June of 2006.”

I am formally requesting that:

- (1) Prior to any decision on the HDPP’s Petition to Revise Soil and Water Conditions, that the case be re-opened for a full environmental review. The only way that the Commission can even look at modifying [if at all] these important Soil and

Water Conditions, is if the case is fully re-opened, and the cumulative impacts of both projects are fully explored with all facts properly before the Commission.

- (2) If not fully re-opened, then based on the sworn testimony of the HDPP staff and the Exhibits presented by Bookman, the Commission must hold that R/O is most reliable process; that R/O should be installed immediately, and HDPP is mandated to meet their licensing requirements of 13,000 acre feet by the end of the 5<sup>th</sup> year of commercial operation or the plant should be shut down. HDPP concurred with all the Energy Commission conditions and agreed to abide by them. The Commission owes the Public the obligation to enforce the conditions approved and agreed to by the parties.
- (3) Shortly after certification I requested to be on the list of parties to get compliance reports and was assured that I would get them. To date I have not received any compliance reports. Please forward copies to me.
- (4) I am requesting the ability to participate in the workshop by phone on June 16<sup>th</sup> 2006

To conclude, I believe the Commission cannot brush away it's own licensing conditions. The Energy Commission's mandate is to protect the environment. It was my view, as well the view of many other members of the Public, that the "dry cooling" technology was the best environmental protection for our area, and would produce the most reliable energy for the future of this community. When the Commission adopted "wet cooling" the Public was assured that the Commission would vigorously protect the environment and seek compliance and enforcement of all licensing conditions. The HDPP petition is another diminution of the Commission's conditions that were intended to protect the environment and the public's interests. It seems to me that the CEC's failure to enforce the conditions it imposed and the conditions that HDPP agreed to will create public distrust and demonstrate none of the Commission's conditions have any teeth.

Respectfully Submitted

Original signed by Gary Ledford

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Encl: Addendum 1 – Portion of Commission Decision – Soil and Water  
Addendum 2 – Portion of Order on Intervenor's Complaint w/o footnotes

## **Appendix 1 – Soil and Water from HDPP CEC Decision**

### **B. Water Resources**

This was **the most highly contested area** in these proceedings. Applicant, Staff, CDFG, and CURE believe that, with implementation of appropriate Conditions of Certification, the HDPP will create no significant adverse impacts to the area's water resources. An Intervenor, Mr. Gary Ledford, strongly disputes the propriety and the impacts of the project's proposed water supply plan. He does not oppose development of the project, per se, but rather basically contends that allowing the project to use imported water for its intended consumptive use gives HDPP a greater amount of water at a reduced rate than other producers in the Basin and thus creates an inequity. (Ledford's Brief on Reopened Hearings and Revised Comments, March 7, 2000, p. 20; see also 1/27/00 RT 24.)

The overall record (both evidentiary and non-evidentiary) contains extensive documentary, testimonial, and non-testimonial explanations of these disparate positions as they relate to water use within the basin, broader regional water issues and the use of imported SWP water in general, and the effects of the project upon future growth. While we have considered all of these aspects, we do not provide a complete recital of all competing contentions herein.

Rather, we summarize and address only those points which we find most salient and necessary to understand and objectively evaluate the evidence, and to formulate our decision.

#### **1. Summary of the Evidence**

The Mojave River Groundwater Basin is severely overdrafted. This essentially means that more water is pumped from the basin than is replaced. This overdraft condition has been characterized as "severe and critical". (10/8/99 RT 139: 5-7.)

Groundwater quality in the project vicinity meets state and federal drinking water standards. (Ex. 87, p. 6.)

ii.) Basin Adjudication. In response to a lawsuit by the City of Barstow and the Southern California Water Company filed in 1990, MWA requested the Riverside Superior Court (Case No. 208568) declare the natural water supply of the Mojave Basin inadequate to meet existing water demand and that the court establish water production rights for individual producers throughout the basin. Negotiations among various parties resulted in a "stipulated agreement" and further judicial proceedings. In 1996, the Superior Court adopted the measures included within the stipulated agreement.

One expert witness explained it thus:

"... the purpose of the adjudication was to develop a revenue supply for [MWA] to purchase water. That revenue supply is generated as people produce, pump in excess of their free production allowance, they have to pay a replacement assessment to the watermaster.

iii.) Applicant's Basic Water Plan. Both the 678 MW and the 720 MW configurations proposed by Applicant will use substantial amounts of water for their respective cooling needs. The larger configuration would use approximately 4000 acre-feet annually, with the smaller consuming approximately 3300 acre-feet each year. (Ex. 87, p. 12.) A relatively small degree of potable water will also be required. 37

Applicant proposes to use State Water Project (SWP) water for its cooling and makeup water needs. The SWP water would be conveyed to the project site via a two and one-half mile long pipeline which would interconnect with the Mojave River pipeline. (10/8/99 RT 23.) The SWP water would either be used directly at the power plant or, after treatment at the power plant's water treatment facility, be injected for storage through a series of seven wells located approximately six miles from the plant. This injection for storage is characterized as creating a water "bank". This storage would enable the project to procure SWP water, when it was available, for later use. (10/7/99 RT 301.) As necessary, this stored water would then be pumped and returned to the power plant for cooling uses. (10/7/99 RT 176-77, 182, 212, 261; 10/8/99 RT 54-55.)

See Page 213 "State Water Project water which is used directly for cooling purposes does not require treatment. Conversely, injection of this same water into the underlying aquifer requires {emphasis added} treatment so that the injected water will meet applicable water quality standards". (10/7/99 RT 213; 10/8/99 RT 54-55.)

Under its proposal, Applicant would use only imported SWP water for plant cooling purposes. (10/7/99 RT 184: 4-10.)

Expert testimony from Applicant and Staff, and supported by representatives of MWA and VVWD, indicates that the proposed water supply plan is consistent with the terms of the adjudication summarized above. (10/8/99 RT 329: 10-13; Ex. 130, p. 2.) Mr. Ledford, however, contends that provisions of the water supply plan violate Article X, section 2 of the California Constitution,<sup>41</sup> and that Applicant should be required to purchase two acre feet of water for every acre foot the plant consumes in order to provide excess water for aquifer recharge. (Ledford's comments on PMPD, January 6, 2000 pp. 11-13; Brief on Reopened Hearing, March 7, 2000, p. 19.) Several commentators support his basic position.

iv.) Potential Impacts and Mitigation. Evidence presented by Staff and CDFG establishes that, **unless adequately mitigated, the project's pumping of stored water could cause a decline in river bank discharges and base flows, or in the water level of the Mojave River Alluvial Aquifer.** This in turn would result in adverse effects upon riparian vegetation and, ultimately, species dependent upon this vegetation.<sup>42</sup> (10/8/99 RT 107; Ex. 93, p.2.) Mr. Ledford contends that providing SWP water as currently proposed for the HDPP will prevent MWA from curing the overdraft situation in the basin since the project will not provide excess water for recharge. (10/8/99 RT 7, 64-65, 75.)

Applicant, Staff, and CDFG developed a modeling regimen to assess project impacts. The evidence establishes that the model was designed to represent the major hydrogeologic properties of the groundwater system, as well as the hydraulics of the interaction with the Mojave River. It employed conservative assumptions based upon the best available data and accounted for the pumping and injection activities of the project in order to ascertain any project related changes in the groundwater levels or the stream flow of the Mojave River. **The model also considered the loss of injected water through dissipation.** (10/7/99 RT 228-29, 231; 10/8/99 RT 103, 106-09; Ex. 87, pp. 2756.)

This modeling analysis considered only the impacts of the HDPP; the expert testimony of record indicates that this approach is appropriate. (10/7/99 RT 229-30, 327; 10/8/99 RT 42, 104, 119.) No evidence was presented which persuasively refutes the validity of the modeling results.

These modeling results establish that the project's water supply plan, if properly defined in Conditions of Certification, will not cause or contribute **to the depletion of water resources in the area and will actually result in a slightly beneficial effect.** (10/7/99 RT 238-239, 328-29; 10/8/99 RT 132-33, 145-46.) To ensure these results, several witnesses explained what the Conditions of Certification must require. (see Ex. 142.)

See Page 216 - Briefly, the key provisions are:

- the HDPP will use only imported SWP water for cooling uses; other water may not be substituted for this purpose (10/7/99 RT 272:7-13, 275:5-12, 291:16-19, 306:13 to 307:3);
- **at all times, including prior to commencing operations and at the conclusion of operations, a balance of 1000 acre-feet (after accounting for dissipation) must be stored in the project's water "bank"** (10/7/99 RT 199, 206, 209; 10/8/99 RT 116);
- **if at any time the water balance in the bank is at 1000 acre-feet, the HDPP must shut down** (10/7/99 RT 208; 10/8/99 RT 26, 122, 124);

- though the annual amount of SWP water imported for the project will vary, no later than the end of five years after the commencement of operations a total of 13,000 acre-feet of water must be injected into the groundwater system (10/7/99 RT 337; 10/8/99 RT 25, 113-14);

- dissipation of injected water is factored in and aquifer tests will be conducted annually, or if necessary quarterly, to monitor groundwater behavior; this monitoring will use the best data available (10/7/99 RT 261, 270; 10/8/99 RT 14751; Ex.. 131, p. 2 );

- up until the last three years of project operation, stored water that is removed from the bank must be replaced by injecting additional SWP water (10/7/99 RT 201-02, 262; 10/8/99 RT 115). The testimony confirms that Applicant can implement its water plan under the provisions of such conditions. (10/7/99 RT 181: 1-4.) With these restrictions and the importation of SWP water for project use, Staff and CDFG conclude that the HDPP would cause no impacts to the area's water resources, either to the Mojave River Alluvial Aquifer, Mojave River base flows, downstream water users, or, on average, to water levels in nearby wells. (10/8/99 RT 107-09; Ex. 87, p. 25.) In the opinion of these parties, the HDPP, as mitigated, will be water neutral and will not contribute to any decline in the underlying aquifer regardless of the level of any future redevelopment which may occur at George Air Force Base. (10/8/99 RT 145: 9-13; Ex. 131.) Thus, all parties except Mr. Ledford agree that, with the implementation of appropriate Conditions of Certification, the HDPP will not create or contribute to any significant direct or cumulative adverse environmental impacts upon water resources. (10/7/99 RT 22, 159; Exs. 87, p. 58; 131; see also, CDFG s April 14, 2000 comments on the Revised PMPD.)

After reopening the evidentiary record, the Committee received evidence concerning any potential growth inducing impacts associated with the HDPP. [See, 14 Cal. Code of Regs., / 15126.2(d).] The principal concern expressed by Staff, CDFG, and Mr. Ledford revolved around whether the HDPP s water supply plan, including the Aquifer Storage and Recovery Agreement with VVWD (Agreement; Ex. 145), would result in, or remove an impediment to, a level of growth which had not been included in the project analysis. (See, e.g., Staff s March 7, 2000 Brief, pp. 1-4.) More specifically, Staff, with support from CDFG, opined that the water supply plan could allow VVWD to treat and inject water for later sale which, in turn, could remove an impediment to future growth. (2/18/00 RT 191-192; 200201, 204.) Mr. Ledford was also similarly concerned that the project facilities would provide VVWD with additional capacity which could be used to serve, or expand, its customer base. (2/18/00 RT 222-23, 226-27; Exs. 168, p.5; 172, p.4.)

Applicants basic view is that the requirement to analyze growth inducing impacts must be predicated upon a real expectation — not merely a speculation — that VVWD will use the projects water facilities to induce, or remove an impediment



to, a level of growth. (2/18/00 RT 104-114; see also, Applicant's March 7, 2000 Brief, pp. 8-10.) Applicant points out that it has reduced the term of the Agreement with VVWD to 50 from 80 years (2/18/00 RT 96), and that various provisions of the Agreement assure that VVWD will not use the water supply plan and project water facilities to expand District services. While the Agreement states that VVWD will own and operate the project's water wells, pumping station, and pipeline (Ex. 145, section 1), testimony from Applicant's witness, corroborated by testimony from a representative of VVWD, indicates their mutual interpretation is that VVWD cannot rely on these facilities to meet any load growth or existing demand in the District's service territory. (2/18/00 RT 99, 106, 134, 155.) These witnesses further indicated that, in addition to supplying the HDPP, VVWD could use the project wells to displace pumping from other wells closer to the Mojave River (2/18/00 RT 130, 138, 153, 163-64), or to inject water to recharge the groundwater basin (2/18/00 RT 134; Ex. 145, section 8.3), but not to provide domestic water supply to customers (2/18/00 RT 101.)

The water treatment plant will be owned and operated by Applicant (2/18/00 RT 160, 216-17) and will, when not being used to treat SWP water for injection into the project's water bank, have capacity available to treat additional water. (2/18/00 RT 158:11-18.) The Agreement does not specifically address use of this available capacity (2/18/00 RT 58:11-18), but the testimony indicates that VVWD could purchase SWP water from MWA, and then use the facility to treat that water for injection and aquifer recharge. (2/18/00 RT 101, 120.) While, once treated and injected, this water could be withdrawn and used for domestic purposes (2/18/00 RT 130), the testimony indicates that any Injected water, including that stored and eventually used for project cooling, must be treated to meet applicable standards. (2/18/00 RT 199:2-6, 212:15-21.) such treated water would be used solely for groundwater recharge. (2/18/00 RT 129, 166:2-6.) Additional, non-project water storage by VVWD would require a separate storage agreement with MWA, subject to CEQA review by that agency.

The other parties do not directly challenge the foregoing. Rather, their position is essentially that VVWD's use of the water treatment plant, wells, and associated facilities could remove an impediment to growth (the effects of which have not been analyzed) unless appropriate restrictions are imposed. (2/18/00 RT 192.) Staff, with CDFG's support, therefore proposed four Conditions of Certification in addition to those which were reflected in the December 1999 PMPD. In summary, these new Conditions would require:

- reevaluation of the groundwater study in thirty years should the project wish to continue operation (proposed as Condition 6.d);
- Applicant to maintain ownership of all project water facilities, including the wells (proposed as Condition 7);
- that continuing operation of the water facilities be addressed in the project

closure plan (proposed as Verification to Condition 6); and

- that VVWD s use of the water treatment facilities be limited to emergency Conditions (proposed as Condition 17.4; 2/18/00 RT 192-93; Ex. 146A, p.5.)

At the February 18, 2000 hearing, Staff and CDFG indicated that these Conditions would adequately limit the potential for the occurrence of growth inducing impacts. (Ex. 146A, p. 3; see also, Staff s March 7, 2000 Brief, p.5.) CDFG also proposed clarifying changes to the Conditions in the December 1999 PMPD. (CDFG s February 16, 2000 Comments.) [On March 24, 2000, after circulating proposed revisions to Conditions 7 and 17.4 to all parties for review and comment, Staff provided alternative language for consideration. These revised Conditions do not attempt to introduce new evidence into the record, but rather are clarifying revisions based upon the evidence of record through the February 18 hearing. (Staff proposed Alternative Soil & Water Resources Conditions, March 24, 2000). The net effect of the proposed revisions is to require Applicant to retain operational control of the water treatment plant, rather than the plant and wells, and to remove the restriction regarding VVWD s use of the water treatment facility to emergency circumstances as indicated in 17.4. Instead, the clarifying revisions contain a new Condition of Certification (SOIL&WATER-19) which specifically requires Applicant to limit VVWDs use of the treatment plant and recognizes that use of the water treatment facility for non-project purposes by VVWD requires a separate storage agreement with MWA, which is subject to further CEQA review.]

At the February 18, 2000 hearing, Applicant opposed two of the four newly proposed conditions: requiring it to retain ownership of the wells (proposed as Condition 7; see Ex. 146A, p. 11); and limiting VVWD s use of the water treatment facility to emergency circumstances, not to exceed fourteen days per calendar year (proposed as Condition 17.4; see Ex. 146A. p. 16; see also 2/18/00 RT 98-99). VVWD opposed the new Staff Conditions in general, but most stridently the limitation upon its use of the water treatment facility. (2/18/00 RT 159, 161.) The VVWD representative noted that the governing Board had thrice adopted the Aquifer Storage and Recovery Agreement (Ex. 145), with various provisions to maintain consistency with proposed Conditions of Certification, and that the acceptability of further modifications at that point was uncertain. (2/18/00 RT 148-51.)

Witnesses presented by Mr. Ledford did not address particular provisions of the proposed Conditions of Certification. Rather, these witnesses emphasized that the water supply pipelines were larger than needed to provide 4000 acre feet of water for plant cooling. (2/18/00 RT 221-23, 226; see also Exs. 168, 172; 1/27/00 RT 26.) Additionally, one witness testified that water treatment plants are modular and can readily be expanded (2/18/00 RT 226.) In the opinion of these witnesses, this combination of factors could provide VVWD with access to a presently unavailable source of treated water which, in turn, VVWD could use,

presumably to meet additional customer needs and thus result in growth inducing impacts. (2/18/00 RT 222-23, 227; see also, Ledford s March 7, 2000 Brief, p. 4.)

## 2. Discussion

Based upon the presentations at the February 18, 2000 hearing, it appeared Applicant and VVWD continued to oppose the imposition of certain additional Conditions of Certification supported by Staff and CDFG. This situation has, however, apparently changed. However, to our knowledge, Mr. Ledford continues to contest the sufficiency of the proposed mitigation measures and Conditions of Certification for a myriad of reasons, and fundamentally contends that, since evaporative cooling will be a 100 percent consumptive use, the HDPP must provide replacement water to the basin or be required to use dry cooling. (Ledford s 11/16/99 Reply Brief, p. 7; see also 1/5/00 PMPD comments, pp. 12-13 and 3/7/00 Brief, pp. 5-7.)

Mr. Ledford contends that MWA's primary duty is to cure the overdraft in the water basin and that it is violating this duty by potentially providing SWP water for use at the HDPP. (10/8/99 RT 7-8, 73, 177-80.) In his view, MWA should only supply water to HDPP at a "2 for 1" rate (i.e., require HDPP to purchase 8,000 acre feet annually) so that the excess water could be used for aquifer recharge and thus ensure that the power project is placed on an equitable footing with other water users. (1/27/00 RT 24; 1/5/00 PMPD comments, pp. 12-14.)<sup>47</sup> In rejecting this contention, the Committee presumed that other governmental entities would act properly and in conformity with their own rules. Mr. Ledford continues to dispute this notion, inferring that recent local political activities demonstrate the irregularity of MWA s potential actions. (10/8/99 RT 14.) (See Ledford s 11/16/99 Reply Brief, p. 5.)

In its post-hearing comments (March 7, 2000), VVWD indicated its willingness to enter into an agreement with the CEC to insure that it [VVWD] complies with pertinent Conditions of Certification. (p.2.) Staff provided revised proposed Conditions, and Applicant also filed an additional response, on March 21, 2000, indicating its support for the revised Conditions. CDFG also endorsed the revised Conditions. (CDFG s April 14, 2000 comments.)

Here we address the most germane contentions and summarize how, in our opinion, the Conditions of Certification ensure that the HDPP water supply plan will not result in the creation of significant adverse impacts to water resources. In this regard, there is simply no credible reason for us to question the propriety of any future action MWA may take. We note that the evidence of record establishes that MWA is the watermaster responsible for managing the water basin and may, consistent with the terms of the adjudication, continue to provide water to qualified users. The law (Water Code / 380, et. seq.) specifically recognizes the important water management role of agencies such as MWA.

We also note that the evidence of record establishes that MWA, through its existing agreements with the Department of Water Resources and as a water wholesaler, is entitled to 75,800 acre-feet of SWP water, as available, annually. MWA has never taken over 17,000 acre-feet of this annual entitlement. (10/7/99 RT 183; 10/8/99 RT 2223, 31.) Thus, MWA has access to a considerable amount of SWP water which it has not used. However, the evidence also indicates that it lacks available revenues to purchase this water and use it to address the overdraft. (10/8/99 RT 33, 37-38; Ex. 87,

p. 5; Ex. 130, p. 3.) This suggests that revenues provided for purchase of SWP water for the project will also allow MWA to purchase additional water for recharge. (Id.) Regardless of the amount of water available, however, the key point is that the project's use of cooling water will not result in any significant adverse environmental impacts since, without sufficient imported water, the project cannot operate. **This requirement is memorialized in Condition SOIL&WATER-1, below. Whether or not MWA chooses to, or can, provide this water, consistent with its applicable ordinances, is not our water management decision and is a risk borne by this privately funded Applicant in a competitive marketplace.** (See 1/27/00 RT 47-48.) For our purposes, and as Staff points out, it is important only that the project's water plan not interfere with MWAs ability to address the overdraft. (Staff Brief 11/19/99, p. 2.) The evidence establishes that it does not.

Mr. Ledford asserts that the present power plant project is part of a larger plan for reuse of the former George Air Force Base and that we must therefore examine the level of development and water needs associated with such potential reuse. (See Ledford 11/3/99 Opening Brief, p. 3; 1/5/00 PMPD comments, pp. 5-6.) The Committee rejected this contention in declaring that the "project" for purposes of our review is the power plant and its appurtenant facilities. (10/8/99 RT 13-14.) As explained in the Project Description portion of this Decision, *supra*, we cannot agree with Mr. Ledford's characterization of the scope of the project. Moreover, we note that the evidence summarized above persuasively establishes that, regardless of any level of future development, the HDPP project will essentially be water neutral insofar as the local aquifers are concerned since it will use only imported SWP water for cooling purposes.

Mr. Ledford also argues that use of cooling water by the project is inconsistent with State Water Resources Control Board Policy 75-58. (Ex. 124.) We explored the applicability of this statewide Policy during the hearings. It suggests limitations, where feasible, upon the use of fresh inland waters for power plant cooling. The evidence shows that Applicant assessed the use of reclaimed water and FPA allotments as alternative sources of cooling water. CDFG opposed the use of these sources, however, since such use would take water from the basin and potentially cause adverse impacts to riparian vegetation. (10/7/99 RT 151-55; see also Exs. 14, 15, 65.) Under these circumstances, and in the opinion of

the expert witnesses, the project's use of SWP water is consistent with Policy 75-58. (10/7/99 RT 216-18, 329-30; 10/8/99 RT 165-67.)

Somewhat paradoxically, Mr. Ledford raised concerns that the project would use reclaimed water from the Victor Valley Waste Water Authority. (2/18/00 RT 140-43), and desires a Condition preventing use of the wastewater. (Ledford s 3/7/00 Brief, p. 18.) Applicant stated it was already precluded from using such source, but did not object to a specific prohibition to that effect. (2/18/00 RT 143-44.) We have included this prohibition in Condition SOIL & WATER-1.d, below.

The law does not require that a project cure an area s existing problems (such as overdraft), but rather that it seek to minimize its impacts caused by changes to the existing physical conditions. [14 Cal. Code of Regs., / 15126.2(a).] Overall, the key concerns in evaluating Applicant s water supply plan are ensuring: 1) that only imported water be used for the project so that the project not cause the groundwater basin to be further depleted; and 2) that the water plan be used to supply water for only the HDPP project. It is axiomatic that the water supply agreements previously summarized are required in order to supply project water.

The December 1999 PMPD noted that the submission of a final Aquifer Storage and Recovery Agreement (Agreement) with VVWD would be necessary to determine whether complying with the terms of an ancillary contract could result in the creation of environmental impacts which have not been analyzed and appropriately mitigated. Staff and CDFG shared these concerns since pumping from VVWD wells closer to the Mojave River could adversely impact riparian vegetation. (10/8/99 RT 100-01; Staff s 11/5/99 Brief, p. 4.) The initial PMPD also reflected the intent that this imported water be used solely for the HDPP project, and that an executed Agreement should allay concerns voiced during the hearings over whether the water imported for use at the HDPP could be put to other uses, or potentially create growth inducing impacts. (See generally, 10/7/99 RT 272-81; 10/8/99 RT 57; Ledford s 11/16/99 Reply Brief, p. 7.)

Applicant offered an executed Agreement as one of the reasons supporting its Motion to reopen the evidentiary record. The provisions of this Agreement, their consistency with our Conditions of Certification, the potential uses of water imported for the project, and use of the project s water facilities were explored at the February 18, 2000 evidentiary hearing.<sup>51</sup> These matters also included any potential growth inducing impacts.

Although we require a will serve letter prior to the start of commercial operations (SOIL & WATER-3, infra), Mr. Ledford believes this agreement is needed prior to certification. (Ledford s April 14, 2000 comments, p.12.)

We require the final version, **incorporating all our Conditions**, prior to commencing project construction (Verification to Condition SOIL&WATER 17; infra).

At the outset, we note that the general matter of the impacts of importing SWP water into the basin has already been analyzed in the environmental documents underlying MWA's Regional Water Management Plan (Ex. 110, p. 2) and also as part of the CEQA review evaluating the recent transfer of additional SWP entitlements to MWA.<sup>52</sup> On a more particularized level, i.e., the impacts of the HDPP project, uncontradicted testimony from both Applicant and VVWD clearly indicates that the 1,000 acre feet of imported water discussed during these proceedings will be used for project cooling and not for other purposes. **Moreover, our Conditions of Certification provide a comprehensive modeling and monitoring regimen to track water use and ensure that the HDPP does not consume native groundwater. (See, e.g., Conditions SOIL&WATER-4, 5, 6, 8-10, 13, 17, 18, infra.)** We further note that the weight of the evidence of record does not establish that the project, including its appurtenant facilities, will create or lead to any future new projects or level of growth. Although various commentators have characterized the project as providing a needed economic stimulus to the area (10/7/99 RT 170-71) and vital to energizing redevelopment (2/18/00 RT 87), the testimony of record indicates that the HDPP is not growth inducing, has characterized the project as preventing long-term growth, and nowhere identifies any additional development planned or reasonably expected to occur as a result of the project. (See, e.g., 9/30/99 RT 123-24, 139:19-21, 140-41.)

The concerns expressed during the hearings regarding the project's growth inducing impacts therefore appear founded upon a considerable degree of speculation in that they are oriented toward future non-specific development which possibly could occur. Moreover, this possible future development and accompanying level of impact are not centered around the power plant but rather the HDPP's water supply and treatment facilities. Specifically, various parties are apparently concerned that VVWD — a public agency -- could essentially use the project's water wells, pipeline, and water treatment facilities to meet its customer demands or to expand its water supply.

The facts established by the evidence of record do not support the credibility of these speculations. First, while VVWD will own and operate the injection wells (and will be reimbursed by HDPP for design and construction costs), the evidence establishes that the intended use of these wells is for direct injection of imported water for storage and extraction of stored water for plant cooling. (2/18/00 RT 99:11-14; 106:3-6; 116:13-18; 134; Ex. 145, sections 1, 3, 8, 10, 11, 12.) VVWD may, however, use these wells only to inject additional water, if available, for aquifer recharge, or to displace pumping from existing wells nearer the Mojave River. (2/18/00 RT 108:21-25, 129, 136-38, 153, 157, 164.) Testimony indicates that the former use would assist VVWD in decreasing its reliance on groundwater, and that the latter use would reduce the current level of impact upon riparian habitat. (2/18/00 RT 137, 153-56.)

VVWD's ownership and operation of the wells appears to be mutually beneficial to VVWD and to HDPP. VVWD will gain operational flexibility and have well costs absorbed by HDPP; HDPP, in turn, will not have to assume responsibility for well installation, operation, maintenance, or land acquisition. (2/18/00 RT 99, 105-07, 139; Ex. 145.) Ownership does not provide VVWD with additional facilities or water supplies which it could not otherwise obtain. The uncontroverted testimony establishes that, with or without ownership of the project wells, VVWD may continue to install wells to extract water to meet the demands of its customers and must pursue obtaining additional water rights consistent with the provisions of the adjudication. (2/18/00 RT 99-100, 102, 106, 108, 136, 154-55, 165:15-20; 167-68.) The project wells (or their ownership) thus neither enhance nor diminish VVWD's existing ability to obtain additional capacity nor, in view of the more costly nature of imported water versus the rights to unused groundwater,<sup>53</sup> provide an economic incentive for VVWD to rely upon them.

The testimony of record establishes that VVWD's cost of imported water (including purchase, treatment, and delivery) is about \$400 per acre foot. By comparison, purchase of unused groundwater carryover rights are approximately \$35 per acre foot. (2/18/00 RT 156-57.)

Next, witnesses sponsored by Mr. Ledford established that the water pipelines are larger than needed to solely supply the project's annual operational needs of 4000 acre feet. (2/18/00 RT 221, 226.) Mr. Ledford apparently believes this fact, when viewed in combination with other existing and planned pipelines, indicates that VVWD may intend to use the project pipeline to meet, or expand, the needs of its service area. (See generally, 2/18/00 RT 121-25, 179-83.)

The evidence simply does not support Mr. Ledford's conjecture. Direct, uncontradicted testimony establishes that the design capacity of project pipelines is required to meet project needs. (2/18/00 RT 126:19-25 to 127:1-4; see also, Ex.14.) These needs include peak, not just average, water flows in order to transport water both for cooling as well as injection for storage.<sup>55</sup> (2/18/00 RT 117-19.) Moreover, the evidence persuasively establishes that the project's water pipelines will not be interconnected ( looped ) with existing or currently planned pipelines (2/18/00 RT 179-83), other than is necessary to allow VVWD to use project wells to supply the project or to offset existing pumping near the Mojave River. (2/18/00 RT 125-26, 179-83.)

**Since imported water injected into the aquifer (whether for storage, recharge, or domestic use) must first be treated to meet applicable standards, HDPP's water facilities include a water treatment plant.** Unlike the wells and supply pipelines, HDPP will own and operate this unit. (2/18/00 RT 119-20, 130:14-16; see Condition SOIL&WATER-7.)

Testimony from Applicant and VVWD indicates that while the Agreement allows VVWD to use the project's water facilities to serve customers other than HDPP,

such use must expressly be consistent with our Conditions of Certification. (2/18/00 RT 134; Ex. 145, section 15.) This testimony further establishes that, while VVWD does not currently have treated water for injection available (2/18/00 RT 165:3-5), the Agreement limits VVWDs Staff apparently agrees since its revised version of Condition 7 (March 24, 2000) requires HDPP ownership of only the project water treatment plant. CDFG does not oppose certification which does not require well ownership by Applicant. (CDFG s April 14, 2000 comments.) use of the project s water facilities to aquifer recharge (as opposed to domestic supply) purposes only. (2/18/00 RT 101, 129, 166:1-6.)

The testimony also establishes, however, that once water is treated and injected, the possibility exists that it could be supply domestic or other needs. (2/18/00 RT 119-20, 130:14-16.) This factor has been characterized as one which creates the potential for growth inducing impacts which have not been analyzed as part of the project. (See, e.g., 2/18/00 RT 201, 212.)

We recognize that VVWD may desire to use the facility for aquifer recharge purposes. This use could benefit the over drafted basin by either replenishing water or displacing pumping of existing groundwater. Even though the Agreement allows VVWD to use the treatment plant only for groundwater recharge, and VVWD acknowledges that its direct use for other purposes would require additional analysis (2/18/00 RT 158), we recognize the possibility that such potential use be characterized as one which allows VVWD to gain access to additional water supplies. To prevent this, we believe it prudent to simply specify in our Conditions of Certification the purposes for which VVWD may use the project s water treatment facility.

In this regard we note that Staff filed a clarification to the additional Conditions proposed at the February 18, 2000 hearing. (Staff Alternative Conditions , March 24, 2000.) This submittal includes a revision to Condition SOIL&WATER-17 and a new Condition 19 which, to our reading, succinctly memorializes the limitation upon VVWD s use of the water treatment facilities to aquifer recharge purposes only. **We believe this language adequately captures our intent and the stated intention of Applicant and VVWD.** We further note that should VVWD wish to use the water facility to treat water for other purposes, such action would require a separate storage agreement between MWA and VVWD, and additional CEQA review as provided in MWA s Ordinance 9.

**We have included an additional Condition (SOIL & WATER-1.e, infra), specifying that the water facilities be consistent with the design specifications of the project. (See, 2/18/00 RT 135:7-11.)**

In summary, we have examined the water issues in depth. The Conditions of Certification require the HDPP to use only imported water for cooling purposes, and provide a comprehensive monitoring apparatus to ensure that project operations are water neutral , at worst, and do not further deplete water levels in



the aquifer. **We have also included provisions requiring reexamination of the water situation as part of project closure activities (SOIL&WATER-6.d.), and have required that the project s water treatment facilities be used only for project or aquifer recharge purposes (SOIL&WATER-19). We believe that the weight of the evidence of record establishes that the comprehensive requirements set forth below are adequate to mitigate the impacts of the HDPP to below a level of significance and to preclude use of project facilities from resulting in growth inducing impacts or from any adverse effects upon water resources.**

Finally, we realize that our Conditions do not resolve the broader water management issues within the region as articulated by Mr. Ledford.<sup>56</sup> We have examined the project s consistency with statewide water policies and supply assessments, and can conclude only that the choice of how water is used within a particular region is simply not within our jurisdiction. This choice is subject, in main part, to decisions and water allocation rules established by MWA, in accordance with the direction of the court adjudication and its responsibilities as watermaster. We trust that agency will balance all competing factors in formulating its necessary analysis and fulfilling its obligations.

## FINDINGS and CONCLUSIONS

Based upon the persuasive weight of the evidence of record, we find and conclude as follows:

1. Soils in the project area are susceptible to wind and water erosion.
2. **The Conditions of Certification below will ensure that the project does not create any significant adverse impacts to soil resources.**
3. The Mojave River Groundwater Basin is severely overdrafted.
4. The High Desert Power Project will use wet cooling technology.
5. The use of wet cooling technology requires approximately 3300 to 4000 acre-feet of water annually.
6. Under the Applicant s water plan, State Water Project water will be imported to supply the cooling needs of the High Desert Power Project.
7. The Conditions of Certification below require that the High Desert Power Project use only imported State Water Project water for its cooling needs.
8. The Mojave Water Agency supplies State Water Project water on an annual and interruptible basis, and is the court-appointed watermaster for the Basin.
9. The Mojave Water Agency is entitled to approximately 75,000 acre feet per year of State Water Project water.
10. The availability and amount of State Water Project water is determined on an annual basis.
11. The Mojave Water Agency annually determines for which uses its supply of State Water Project may be put.
12. Use of imported State Water Project water by the High Desert Power Project will not negatively affect water levels or supply in the local aquifers, in the Mojave

River, or create a significant new demand upon the supply of State Water Project Water, nor prevent the Mojave Water Agency from addressing the basin's overdraft.

13. The Conditions of Certification require that the project's water treatment facilities be used only for project or for aquifer recharge purposes.

14. Based on the evidence of record, Victor Valley Water District will limit its use of project wells and pipelines to supplying the High Desert Power Project, recharging the aquifer, or displacing existing pumping from wells nearer the Mojave River.

15. **The evidence of record does not identify any future projects which have been specified or are reasonably foreseeable as a result of the High Desert Power Project.** In addition, the Conditions of Certification adequately ensure that the project's water facilities will not remove an impediment to growth, or result in growth-inducing impacts.

16. The analysis of record did not evaluate storage of water for withdrawal and non-project use by the Victor Valley Water District.

17. Before Victor Valley Water District may use the project's water treatment facility for any non-project withdrawal and use, it must first obtain a separate water storage agreement from the Mojave Water Agency.

18. The agreement mentioned in Finding 17, above, is subject to the requirements of Ordinance 9 and additional analysis under the California Environmental Quality Act.

19. The evaluation of record included an examination of alternate sources of water supply for the project.

20. **Impacts associated with the importation of State Water Project water by the Mojave Water Agency have been examined in environmental documentation certified by that agency.**

21. The Conditions of Certification below ensure that the High Desert Power Project will comply with all applicable laws, ordinances, regulations, and standards mentioned in the appropriate portion of Appendix A of this Decision.

We therefore conclude that the High Desert Power Project will not create any significant adverse direct, indirect, or cumulative impacts upon water resources, and that it will be constructed and operated in accordance with all applicable laws.

## CONDITIONS of CERTIFICATION

SOIL&WATER-1 The only water used for project operation (except for domestic purposes) shall be State Water Project (SWP) water obtained by the project owner consistent with the provisions of the Mojave Water Agency's (MWA) Ordinance 9.

a. Whenever SWP water is available to be purchased from MWA, the project owner shall use direct delivery of such water for project operation.

b. Whenever water is not available to be purchased from the MWA, the project owner may use SWP water banked in the seven HDPP wells identified in Figure Number 1 of the Addendum Number 1 to the Evaluation of Alternative Water Supplies for the High Desert Power Project (Bookman-Edmonston 1998) as long as the amount of water used does not exceed the amount of water determined to be available to the project pursuant to SOIL&WATER-5.

c. **If there is no water available to be purchased from the MWA and there is no banked water available to the project, as determined pursuant to SOIL&WATER-5, no groundwater shall be pumped, and the project shall not operate.** At the project owners discretion, dry cooling may be used instead, if an amendment to the Commissions decision allowing dry cooling is approved.

d. The project shall not use treated water from the Victor Valley Wastewater Authority.

e. The projects **water supply facilities shall be appropriately sized to meet project needs.**

Verification: The project owner shall provide final design drawings of the projects water supply facilities to the CPM, for review and approval, thirty (30) days before commencing project construction. Verifying compliance with other elements of Condition SOIL&WATER-1 shall be accomplished in accordance with the provisions of the Verifications for Conditions 2, 3, and 6, as appropriate.

SOIL&WATER-2 The project owner shall provide a copy of the storage agreement between the Mojave Basin Area Watermaster (Mojave Water Agency) and VVWD prior to the initiation of any groundwater banking, and within fifteen (15) days of any amendment or renewal of the storage agreement.

Verification: The project owner shall submit to the CEC CPM a copy of the application for a storage agreement (for the project s cooling water) with the Mojave Basin Area Watermaster at the time the application is filed. The project owner shall submit to the CEC CPM a copy of the approved storage agreement from the Mojave Basin Area Watermaster within fifteen (15) days of receipt of the agreement.

SOIL&WATER-3 The project owner shall provide a copy of a "Will Serve Letter" from VVWD to the CEC CPM prior to the start of commercial operation.

Verification: The project owner shall provide a copy of a "Will Serve Letter" from VVWD to the CEC CPM within thirty (30) days of its receipt by the project owner.

SOIL&WATER-4 Injection Schedule:

a. The project owner shall inject one thousand (1000) acre-feet of SWP water within twelve (12) months of the commencement of the projects commercial operation.

b. By the end of the fifth year of commercial operation, the amount of water injected minus the amount of banked groundwater used for project operation, minus the amount of dissipated groundwater **shall meet or exceed thirteen thousand (13,000) acre-feet.**

c. After the fifth year of commercial operation and until three (3) years prior to project closure, the project owner shall replace banked groundwater used for project operation as soon as SWP water is available for sale by MWA. The project owner may choose to delay replacement of a limited quantity of banked groundwater used for project operations during aqueduct outages until the cumulative amount of groundwater withdrawn from the bank reaches one thousand (1,000) acre-feet. Once the limit of one thousand (1,000) acre-feet has been reached, the project owner shall replace banked groundwater used for project operation during aqueduct outages as soon as SWP water is available for sale by MWA.

See the verification to Condition 5.

#### SOIL&WATER-5 Calculation of Balance:

a. The amount of banked groundwater available to the project shall be calculated by the CEC staff using the HDPP model, FEMFLOW3D. The amount of banked groundwater available shall be updated on a calendar year basis by the CEC staff, taking into account the amount of groundwater pumped by the project during the preceding year and the amount of water banked by the project during the preceding year.

b. When calculating the amount of banked groundwater available to the project, CEC staff shall subtract any amount of water that is produced by Victor Valley Water District (VVWD) from the project wells for purposes other than use by the project that exceeds the baseline, as defined in SOIL&WATER-17(1).

c. Each annual model run shall simulate the actual sequence of historic pumping and injection since the injection program began. From the model runs, the CEC Staff shall determine the amount of groundwater available for each new calendar year. If the amount of banked groundwater available to the project is less than one (1) year's supply plus 1,000 acre-feet, the CEC Staff shall determine the amount of groundwater available to the project on a quarterly basis.

Verification: During the period beginning eighteen (18) months after the start of rough grading and concluding at the end of the first month after one full year (12 months) of commercial operation, the project owner shall provide a monthly

report to the CEC CPM and to the CDFG on the progress of construction of the project wells, and shall identify the amount of SWP water injected and the amount of groundwater pumped during the previous month. The CEC CPM shall provide notice that this material has been submitted to those identified on the projects compliance mailing list.

After the end of the first month after one full year (12 months) of commercial operation, the project owner shall submit to the CEC CPM and to the CDFG in writing, on a quarterly basis, a monthly accounting of all groundwater pumped and all SWP water treated and injected for the preceding quarter. Within thirty (30) days of receipt of the approved annual storage agreement, pursuant to SOIL&WATER-2, the project owner shall submit to the CEC CPM and to the CDFG an annual written estimate of the anticipated amount of SWP water that will be banked and the anticipated amount of groundwater that will be pumped in the coming year. If the amount of banked groundwater available to the project is less than one (1) year's supply plus one thousand (1,000) acre-feet, quarterly estimates of anticipated injection and withdrawal will be required. The CEC CPM shall provide notice that this material has been submitted to those identified on the project s compliance mailing list.

CEC Staff shall use this information in the HDPP model to evaluate the amount of banked groundwater available and to calculate the approximate rate of decay. CEC Staff shall notify the project owner within thirty (30) days of the amount of banked groundwater available to be pumped in the new calendar year or in the next quarter, if applicable.

#### SOIL&WATER-6 Banked Water Available for Project Use:

- a. The amount of banked groundwater available to the project during the first twelve (12) months of commercial operation is the amount of SWP water injected by the project owner into the High Desert Power Project (project) wells, minus the amount of groundwater pumped by the project owner, minus the amount of dissipated groundwater, and minus any amount described in SOIL&WATER-5(b).
- b. The amount of banked groundwater available to the project after the first twelve (12) months of commercial operation is the amount of SWP water injected by the project owner into the project wells, minus the amount of groundwater pumped by the project owner, minus the amount of dissipated groundwater, minus one thousand (1,000) acre feet, and minus any amount described in SOIL&WATER-5(b).
- c. During the three (3) years prior to project closure, the project owner may withdraw the balance of banked groundwater determined to be available to the project, except for one thousand (1,000) acre-feet, pursuant to SOIL&WATER-5. The project owner is not required to replace this final withdrawal of groundwater. However, during the three (3) years prior to project closure, at no time may the

balance of banked groundwater decline below one thousand (1,000) acre-feet. Furthermore, there must be a remaining balance of one thousand (1,000) acre-feet banked in the groundwater system at closure, as determined to be available to the project pursuant to SOIL&WATER-5. This balance of one thousand (1,000) acre-feet must remain in the groundwater system, and the project owner, by contract or other conveyance, may not transfer the rights to this balance.

d. The project shall not operate for longer than thirty (30) years unless the Commission has approved an amendment to its license that specifically evaluates the water resources impacts of continued operation and imposes any mitigation necessary to ameliorate any identified impacts.

e. No water is available for project use if the requirements of SOIL&WATER-4 are not met by the project owner.

Verification: The project owner shall use the same verification as for SOIL&WATER-5; however, in addition, any facility closure plan submitted during that last three (3) years of commercial operation shall address the disposition of any remaining water available to the project, as well as the disposition of the water treatment facility.

SOIL&WATER-7 The project owner shall retain ownership and operational control of the water treatment facility.

Verification: Should the project owner choose to transfer ownership or operational control of the water treatment facility, it must apply for an amendment to the Energy Commission Decision, and include an evaluation of any environmental effects associated with the transfer of ownership or operational control to another entity.

SOIL&WATER-8 The project owner shall conduct pumping tests in all project wells to establish in situ hydraulic parameters including transmissivity and storativity in the Regional Aquifer. From these parameters and the project well-log data, the project owner shall calculate the following site-specific values:

- effective horizontal hydraulic conductivity
- effective vertical hydraulic conductivity
- specific yield, if pumping tests indicate the aquifer is unconfined, or
- specific storage, if aquifer is confined.

Prior to conducting the pumping test, the project owner shall submit a work plan detailing the methodology to be used to conduct the proposed pumping tests and to calculate the specified parameters and values to the CEC CPM and to the CDFG for review and approval.

Based upon the information generated by the pumping tests, CEC Staff shall revise the HDPP model to reflect the results of the pumping tests. All modeling

runs referred to in SOIL&WATER-5 shall incorporate the results of these pumping tests, following approval by the CEC CPM determined pursuant to this Condition.

Protocol: The pumping tests shall provide data to calculate the in situ hydraulic parameters of the Regional Aquifer.

- At a minimum the pumping tests for all HDPP wells shall include the measurement of drawdown in at least one (1) non-pumping (observation) well that is screened at the same depth as the pumping well.
- Observation well(s) for each pumping test must be sufficiently close to the pumping well that pumping produces measurable drawdown of sufficient duration in the observation well(s) to analyze the site-specific hydraulic parameters including transmissivity and storativity in the Regional Aquifer.
- In addition, if the observation well data indicates a slow release of groundwater from storage, the pumping test shall be extended until the release from storage can be observed to stabilize in a plot of the data from the observation well(s). (For a description of the evaluation of storativity under slow release conditions, see Driscoll, F.G., 1986, Groundwater and Wells, H.M. Smyth, Inc., p. 229-230).
- Single well pumping tests and pumping tests that do not produce enough measurable drawdown in observation wells to conclusively calculate hydraulic parameters will not meet the Conditions of Certification. Verification: The project owner shall submit to the CEC CPM and to the CDFG, six (6) months prior to the start of pumping tests, the work plan that details the methodology for conducting the proposed pumping tests on the seven (7) HDPP wells and for calculating the specified parameters and values. With the approval of the work plan by the CEC CPM, in consultation with the CDFG, the project owner shall perform the pumping tests following the CEC protocol. The CEC CPM shall provide notice that this material has been submitted to those identified on the projects compliance mailing list.

Within two (2) months after the completion of pumping tests, the project owner shall submit to the CEC CPM and to the CDFG a report detailing how the pumping tests were conducted and the results of the tests, including the calculation of: (1) the in situ hydraulic parameters of transmissivity and storativity for the Regional Aquifer; and (2) the site-specific values of effective horizontal hydraulic conductivity, effective vertical hydraulic conductivity, and specific yield and/or specific storage.

The CEC CPM shall provide notice that this material has been submitted to those identified on the project s compliance mailing list.

SOIL&WATER-9 The project owner shall modify the HDPP model grid to accommodate the representation of gradational changes in the hydraulic conductivity of the Regional Aquifer, in conformance with the USGS Mojave River Groundwater Basin model.

The CEC Staff shall revise the HDPP model, using the modified grid, to incorporate the gradational changes in the hydraulic conductivity of the Regional Aquifer represented in the USGS Mojave River Groundwater Basin model.

All modeling runs referred to in SOIL&WATER-5 shall incorporate the modifications of the model along with the model information obtained from the USGS following approval by the CEC CPM determined pursuant to this Condition.

Verification: The project owner shall submit the modified model grid input files (including updated versions of any other input files that are effected by the modification of the grid) within two (2) months after the construction of the HDPP wells to the CEC Staff for review and approval, in consultation with the CDFG. The CEC CPM shall provide notice that this material has been submitted to those identified on the project's compliance mailing list.

SOIL&WATER-10 The project owner shall prepare an annual report describing groundwater level monitoring performed as follows. The project owner shall monitor groundwater levels in all project wells, in VVWD wells 21, 27, 32, and 37, in Adelanto wells 4 and 8a, and in all other wells within a one (1) mile radius of the project wells. Groundwater monitoring shall also be conducted within the Mojave River Aquifer Alluvium. Additional monitoring wells specified by VVWD for the evaluation of well interference within Pressure Zone 2 shall also be included. Monitoring shall be performed on a quarterly basis starting within six (6) months after the start of rough grading.

Verification: The project owner shall annually submit a copy of the groundwater level monitoring report to the CEC CPM, the CDFG, the MWA, and the VVWD. The CEC CPM shall provide notice that this material has been submitted to those identified on the project's compliance mailing list.

SOIL&WATER-11 The project owner shall submit an approved Waste Discharge Requirement prior to the start of any groundwater banking unless the Regional Water Quality Control Board (RWQCB) decides to waive the need to issue a waste discharge requirement or waive the need for the project owner to file a Report of Waste Discharge.

Verification: The project owner shall submit a copy of the approved Waste Discharge Requirement from the Lahontan RWQCB to the CEC CPM within sixty (60) days of the start of rough grading. The project owner shall also submit to the



CEC CPM a copy of any additional information requested by the RWQCB as part of their evaluation of the application. If the RWQCB decides to waive the need to file a Report of Waste Discharge or the need for a waste discharge requirement, the project owner shall submit a copy of the letter from the RWQCB to the CEC CPM. If a waste discharge requirement is required by the RWQCB, the project owner shall provide a copy of the approved permit to the CEC CPM.

SOIL&WATER-12 The project owner shall prepare and submit to the CEC CPM and, if applicable, to the Lahontan RWQCB for review and approval, a water treatment and monitoring plan that specifies the type and characteristics of the treatment processes and identify any waste streams and their disposal methods. The plan shall provide water quality values for all constituents monitored under requirements specified under California Code of Regulations, Title 22 Drinking Water Requirements, from all production wells within two (2) miles of the injection wellfield for the last five (5) years.

The plan shall also provide SWP water quality sampling results from Rock Springs, Silverwood Lake, or other portions of the East Branch of the California Aqueduct in this area for the last five (5) years. Also identified in the plan will be the proposed treatment level for each constituent based upon a statistical analysis of the collected water information. The statistical approach used for water quality analysis shall be approved prior to report submittal by the CEC CPM and, if applicable, the RWQCB. Treatment of SWP water prior to injection shall be to levels approaching background water quality levels of the receiving aquifer or shall meet drinking water standards, whichever is more protective. The plan will also identify contingency measures to be implemented in case of treatment plant upset.

The plan submitted for approval shall include the proposed monitoring and reporting requirements identified in the Report of Waste Discharge (Bookman-Edmonston 1998d) with any modifications required by the RWQCB.

Verification: Ninety (90) days prior to banking of SWP water within the Regional Aquifer, the project owner shall submit to the Lahontan RWQCB and the CEC CPM a proposed statistical approach to analyzing water quality monitoring data and determining water treatment levels. The project owner shall submit the SWP water treatment and monitoring plan to the CEC CPM and, if appropriate, to the Lahontan RWQCB for review and approval. The CEC CPM's review shall be conducted in consultation with the MWA, the VVWD, and the City of Victorville. The plan submitted for review and approval shall reflect any requirements imposed by the RWQCB through a Waste Discharge Requirement.

SOIL&WATER-13 The project owner shall implement the approved water treatment and monitoring plan. All banked SWP water shall be treated to meet local groundwater conditions as identified in Condition SOIL&WATER-12. Treatment levels may be revised by the CEC and, if applicable, by the RWQCB.

based upon changes in local groundwater quality identified in the monitoring program not attributable to the groundwater-banking program. Monitoring results shall be submitted annually to the CEC CPM and, if applicable, to the RWQCB.

Verification: The project owner shall annually submit monitoring results as specified in the approved plan to the CEC CPM. The project owner shall identify any proposed changes to SWP water treatment levels for review and approval by the CEC and, if appropriate, the Lahontan RWQCB. The project owner shall notify the RWQCB, the VVWD, and the CEC CPM of the injection of any inadequately treated SWP water into the aquifer due to an upset in the treatment process or for other reasons. Monitoring results shall be submitted to the CEC CPM

SOIL&WATER-14 The project owner shall provide access to the United States Air Force for all efforts to characterize and remediate all soil and groundwater contamination at the power plant site.

Verification: The project owner shall submit, in writing, a copy within two (2) weeks of receipt of any request from the Air Force for site access to characterize or remediate contaminated soil and/or groundwater to the CEC CPM.

SOIL&WATER-15 Prior to beginning any clearing, grading, or excavation activities associated with closure activities, the project owner must submit a notice of intent to the State Water Resources Control Board to indicate that the project will operate under provisions of the General Construction Activity Storm Water Permit. As required by the general permit, the project owner will develop and implement a Storm Water Pollution Prevention Plan.

Verification: Two (2) weeks prior to the start of construction, the project owner shall submit to the CEC CPM a copy of the Storm Water Pollution Prevention Plan.

SOIL&WATER-16 Prior to the initiation of any earth moving activities, the project owner shall submit an erosion control and revegetation plan for CEC Staff approval. The final plan shall contain all the elements of the draft plan with changes made to address the final design of the project.

Verification: Thirty (30) days prior to the initiation of any earth moving activities, the final erosion control and revegetation plan shall be submitted to the CPM for approval, in consultation with the CDFG.

SOIL&WATER-17 The project owner shall enter into an Aquifer Storage and Recovery Agreement with the Victor Valley Water District (VVWD). This agreement shall contain the following conditions:

1) It shall prohibit VVWD from producing or allowing others to produce water from project wells, except that VVWD may produce water from project wells: (i) for use by the HDPP project pursuant to SOIL&WATER-1; and

(ii) for purposes other than use by the HDPP project pursuant to SOIL&WATER-1 provided that such production, in combination with production from the VVWD wells identified in "c" below does not exceed the amount identified as "the baseline", as defined in a below. a. The contract shall define the baseline as the average aggregated annual production of the wells identified in "c" during the immediately preceding five (5) years. The contract shall state that any water produced by VVWD pursuant to (ii) above shall be included in subsequent calculations of the baseline only if that production does not exceed the baseline for the calendar year in which the production occurs, as required by this Condition.

b. The contract shall require VVWD to establish the first baseline using the five (5) calendar years preceding the operation of the project wells, and shall re-calculate the baseline on a calendar year basis by January 15 of each year.

c. The contract shall state that "wells identified in "c" means VVWD wells that are located in a corridor two (2) to two and one half (2½) miles wide adjacent to and west of the river s western bank including all wells within the following land sections:

- Within Township 6 North, Range 4 West, sections 31, 32, 33, and 34.
- Within Township 5 North, Range 4 West, sections 4, 5, the east of 8, 9, 10, 15, 16, the east \_ of 21, 22, 23, 25, 26, 27, the east \_ of 28, the east \_ of 33, 34, 35, and 36.

2) It shall state that the project owner shall provide to the CEC CPM and CDFG on a quarterly basis a monthly accounting of: 1) all water pumped from project wells that is supplied to the project owner; and 2) water pumped from project wells that is supplied to VVWD.

3) It shall state that VVWD shall provide to the CEC CPM and CDFG a baseline calculation no later than January 15 of each year.

4) The contract may include terms that require VVWD to compensate HDPP for any costs associated with subtractions from the amount of banked groundwater available to HDPP under the terms of SOIL&WATER-5(c).

Verification: The project owner shall provide to the CEC CPM and CDFG a copy of a signed Aquifer Storage and Recovery Agreement with the terms described above prior to commencing construction of the project. Any amendments to this agreement shall be approved by the CEC CPM thirty (30) days prior to the effective date of the amendment. The CEC CPM shall provide notice that this

material has been submitted to those identified on the project's compliance mailing list.

SOIL&WATER-18 The project owner shall ensure that flow meters are installed on project wells such that the total amount of water injected and produced on a monthly basis can be determined. In addition, the project owner shall ensure that separate flow meters are installed on: 1) that portion of the water delivery system that is dedicated to providing water to the project owner; and 2) on that portion of the water delivery system that will be used to provide water to VVWD pursuant to SOIL&WATER-17.1(ii).

Verification: The project owner shall provide to the CEC CPM and CDFG on a quarterly basis a monthly accounting of: 1) all groundwater injected into project wells; 2) water pumped from project wells that is supplied to the project owner; and 3) water pumped from project wells that is supplied to VVWD. The CEC CPM shall provide notice that this material has been submitted to those identified on the project's compliance mailing list.

SOIL&WATER-19 The project owner shall limit any use of water treatment facilities by VVWD or another entity, for purposes other than providing water to the HDPP, to treating SWP water for injection into the regional aquifer. The project owner shall not allow VVWD or another entity to use the water treatment facility for treatment of water that is injected and then recovered by VVWD unless the watermaster and VVWD have entered into a water storage agreement, and for which the appropriate lead agency has completed a CEQA review as required by MWA Ordinance 9. Any water injected by VVWD shall not increase the baseline pursuant to SOIL&WATER-17.1). The project owner shall not enter into any contract or amend any existing contract to allow VVWD or another entity to use the water treatment facility for domestic purposes, unless the Energy Commission has approved an amendment to the project Decision allowing such use.

Verification: The project owner shall provide to the CEC CPM and CDFG a copy of any water storage agreement between the watermaster and VVWD within thirty (30) days of its execution which incorporates these restrictions. The CEC CPM shall provide notice that this material has been submitted to those identified on the project's compliance mailing list.

**Addendum 2**  
**Highlighted Proposed Decision**  
**On Precisely Filed**  
**Complaint W/O Footnotes**

**DOCKET NO. 97-AFC-1C (C1)**

**COMPLAINT OF GARY LEDFORD ON  
HIGH DESERT POWER PROJECT  
COMPLAINT-1**

**WATER ISSUES**

**PROPOSED DECISION ON THE COMPLAINT**

**Summary**

Mr. Gary Ledford, an Intervenor in the certification proceeding, filed a Complaint alleging that the High Desert Power Project violated or intends to violate certain Conditions of Certification related to the project's water supply plan. Mr. Ledford's proposed testimony and exhibits do not establish prima facie evidence of noncompliance with the Conditions. We find that the High Desert Power Project either has complied with the Conditions or the date for compliance has not yet occurred. We therefore dismiss the Complaint in its entirety.

**Procedural Background**

The High Desert Power Project (HDPP or "Respondent") is a 720-megawatt (MW) natural gas-fired combined cycle power plant located on the former George Air Force Base (now called the Southern California Logistics Airport) in the City of Victorville. The Commission certified the HDPP on May 3, 2000.<sup>1</sup>

Complainant Gary Ledford was an intervenor in the certification proceeding and actively participated in the review process.<sup>2</sup> After the project was certified, Mr. Ledford filed a motion for reconsideration, which the Commission denied on June 21, 2000. Mr. Ledford subsequently filed a petition for review with the California Supreme Court. The Court summarily denied review in August 2000.

<sup>1</sup> Commission Decision on the Application for Certification for the High Desert Power Project, Docket No. 97-AFC-1, CEC Publication No. P800-00-003, May 2000.

<sup>2</sup> The certification proceeding involved more than two years of extensive environmental review and numerous public hearings, several of which were devoted to Mr. Ledford's concerns regarding the project's water plan.

Certification that HDPP **must implement during construction and operation of the project**. One of the Conditions **requires HDPP to submit final design drawings of the project's water supply facilities to the Commission prior to construction**.

HDPP submitted its final design drawings on March 27, 2001. The Commission's compliance staff authorized construction of the HDPP on May 17, 2001. HDPP expects to commence commercial operation in the spring of 2003.

### **HDPP's Water Plan**

HDPP will use State Water Project (SWP) water for cooling and makeup water needs. The SWP water will be conveyed to the project site via a 2.5-mile long pipeline ("Northern Pipeline"), which would interconnect with the Mojave River pipeline. The SWP water will be used either directly for cooling at the power plant or, **after treatment by the HDPP water treatment facility, be injected for storage in the Mojave River aquifer and banked through a series of wells six miles from the site. Water from the wells would be conveyed to the project by a 6.5-mile pipeline ("Southern Pipeline"). The creation of the water bank will allow HDPP to procure SWP water when available and store it for later use.**

There are several water agencies involved in implementing the water plan, including the Mojave Water Agency (MWA) that will procure SWP water for HDPP, the Victor Valley Water District (VVWD) that will store the banked water in the storage wells, **and the Lahontan Regional Water Quality Control Board (Lahontan RWQCB) that will monitor water quality of the treated water injected into the wells.**

### **The Complaint**

On October 11, 2001, Mr. Ledford filed a Complaint alleging that HDPP has violated or intends to violate certain Conditions of Certification related to HDPP's water plan.<sup>3</sup> On November 9, 2001, the Chairman of the Commission issued a

During the certification proceeding, Complainant Ledford challenged HDPP's water plan on several grounds. Mr. Ledford asserted, inter alia, that the water supply pipeline would be oversized and that the HDPP's water treatment facility would be used for purposes other than treating water for project use. In the certification decision, the Commission considered and rejected those assertions.

Mr. Ledford raised similar concerns in the Complaint.

The November 9, 2001, Notice of Complaint Proceeding limited the scope of the Complaint to the following issues:

Whether Conditions of Certification Soil & Water 1e, 2, 11, 12, 13, 17(1), and 19 have been violated and if so, what action to take.<sup>4</sup> Specifically:

1 Are HDPP's water treatment facilities bigger than necessary for the power plant, and will additional water be treated by those facilities for non-HDPP purposes? (Conditions 1e, 17(1), 19);

**2 Is HDPP using the proper type of water treatment facilities, and will those facilities fail to provide water "approaching background water quality levels?" (Conditions 12, 13); and**

3 Has HDPP failed to provide to the Commission various documents concerning water use and supply? (Conditions 2, 11, 12, 17, 19).

On December 5, 2001, the Committee issued a Notice of Evidentiary Hearing and Order Setting Schedule for Filing Answer and Witness Lists. On December 28, 2001, the Committee issued a Notice of Prehearing Conference and Order to Produce Compliance Documents.

No. 97-AFC-1C (C1). Section 1230 et seq. of the Commission's regulations governs complaint and investigation proceedings. (See Cal. Code Regs., tit. 20, § 1230 et seq.)

4 The text of each of the relevant Conditions is included in Appendix A  
attached hereto. Unless otherwise indicated in the text of this Decision, citations  
to specific Conditions of Certification refer solely to Soil & Water Conditions.

5  
their Position Statements on January 11, 2001. The Committee conducted a  
Prehearing Conference on January 14, 2001, at which all parties appeared. At  
the Prehearing Conference, the Committee canceled the evidentiary hearing that  
had been scheduled by the Notice of Evidentiary Hearing. On January 14, 2001,  
after considering the proposed testimony and documentary evidence submitted  
by the parties, the Committee also issued a Ruling on the Pleadings, dismissing  
several allegations contained in the Complaint. The Committee's Ruling and the  
remaining issues related to the Complaint are discussed below.

### **Allegations Dismissed by the Committee's Ruling on the Pleadings**

The Committee's Ruling on the Pleadings dismissed the allegations regarding  
Conditions of Certification Soil & Water 1e, 2, 13, 17(1), and 19. Our review of  
the proposed testimony and exhibits revealed that HDPP either has complied  
with or the deadline has not yet occurred for compliance with those Conditions.  
Complainant did not offer any proposed testimony that, if heard by the  
Committee, would have changed these findings.<sup>5</sup>

#### **Condition 1e**

Complainant claims that the project's water supply pipeline is oversized and will  
allow excess water to be treated for non-HDPP purposes. Complainant also  
asserts that the water treatment facilities have the capacity to treat more water  
than necessary for project use. Condition 1e requires the project's water supply  
facilities to be appropriately sized to meet project needs. Testimony in the  
certification proceeding indicated that pipe sizes were developed by HDPP's  
engineers to meet only the project's needs.<sup>6</sup> (Feb. 18, 2000 RT at 117:14-25.)

<sup>5</sup> Much of Complainant's proposed testimony consists of email communications  
and other memoranda between the staffs of the water agencies and Commission  
staff, which represent the review process but not the final agency determinations  
on the issues. Further, Complainant submitted proposed testimony of witnesses  
who had testified on his behalf during the certification proceeding and whose



testimony consists of opinion and conjecture rather than factual information.

<sup>6</sup> Respondent HDPP filed proposed testimony in the Complaint proceeding that includes engineering calculations showing that the 24-inch diameter pipeline is appropriately sized to meet project needs. Since the pipe is sized for peak demand, there will be, at times, underutilized capacity in the pipeline. (Exhibits to Respondent's Position Statement, Jan. 15, 2002, Prepared Testimony of Andrew C. Welch, at p. 4.)

includes "peak" not "average" water flows to provide transport both for cooling and injection for storage. (Commission Decision at p. 227.)

The certification decision also found that the project would need approximately 4,000 acre-feet of water per year for cooling. (Commission Decision at p. 213.)

**The water treatment facilities, however, must be adequately sized to simultaneously provide for both plant cooling and groundwater injection to meet the requirement that 13,000 acre-feet (a three-year supply plus 1,000 acre-feet) be banked during the first five years of project operation.** (Condition 4.)

At the Prehearing Conference, the parties stipulated that the Northern water supply pipeline is designed to be 24 inches in diameter. This pipe size has not changed since HDPP's initial project design was described in the certification proceeding. Nor has the design for the Southern Pipeline changed, which was described as 18 inches in diameter.<sup>7</sup>

The Conditions of Certification collectively ensure that HDPP's use of water is limited to project needs. Condition 17 requires the Aquifer Storage and Recovery Agreement to establish baseline water production of neighboring wells and HDPP wells may not exceed that production in the combined use of its wells and neighboring wells. Condition 18 provides for flow metering on all water injected and pumped from the wells. Condition 19 prevents use of the HDPP water treatment facility for purposes other than project needs.

During the certification proceeding, we previously considered and rejected Complainant's assertions that the water supply pipelines and treatment facilities would be oversized. Complainant may not relitigate the issue in a Complaint proceeding. **As required by the verification for Condition 1e, HDPP submitted its final design drawings of the project's water supply facilities thirty days prior to commencing construction. (See Exhibit L to**

**Respondent's Answer to Complaint.) We recognize that the type of treatment facility was subsequently amended in consultation with the responsible water agencies. However, this does not change the limits on non-HDPP water use established by the Conditions.** The allegations regarding Condition 1e are therefore dismissed with prejudice.

#### Condition 2

Condition 2 requires HDPP to submit a Water Storage Agreement (WSA) between the Mojave Water Agency and the Victor Valley Water District prior to initiation of any groundwater banking. **The parties stipulated that groundwater banking would not commence until approximately September 2002.** {actual start date was April 2003} The Mojave Water Agency expects to finalize the WSA by the end of January 2002. There is no indication that HDPP will fail to submit the WSA in a timely manner. Allegations of noncompliance with this Condition are speculative and not ripe for review. We therefore dismiss the allegations regarding Condition 2 without prejudice.

#### Condition 13

Condition 13 requires HDPP to implement the approved water treatment and monitoring plan and submit monitoring results on an annual basis. The Lahontan RWQCB has not yet approved a water treatment and monitoring plan nor has HDPP completed construction of its water treatment facility. Lahontan is currently reviewing HDPP's proposed water treatment plan. (See discussion of Condition 12, below.) Since there is no requirement that such plan be in effect at the current time, the allegations of noncompliance with this Condition are speculative and not ripe for review. We therefore dismiss the allegations regarding Condition 13 without prejudice.

#### Condition 17(1)

Condition 17(1) requires HDPP to enter into an Aquifer Storage and Recovery Agreement (ASRA) with the Victor Valley Water District (VVWD). The ASRA shall prohibit VVWD from producing or allowing others to produce water from project wells for purposes other than use by the HDPP. The verification to this Condition requires HDPP to submit the ASRA prior to commencing project

construction. HDPP submitted the ASRA to the Commission in February 2000, when it was received as Exhibit 145 in the certification proceeding. The ASRA incorporated the Conditions of Certification as proposed at that time. The Conditions were subsequently revised by the Commission upon adoption of the certification decision in May 2000.

Complainant argues that the VVWD voided the ASRA upon reviewing the final Conditions of Certification adopted by the Commission. Respondent HDPP and the VVWD maintain that the ASRA remains in effect and each submitted letters to the Commission in October 2001, clarifying that the final Conditions of Certification apply to the ASRA.<sup>8</sup> In its Ruling on the Pleadings, the Committee directed Respondent to submit a codicil to the ASRA that would incorporate the final Conditions of Certification and explain any discrepancies between the ASRA and the Conditions as adopted by the Commission. Respondent filed a signed and fully executed codicil on January 18, 2002.

We need not consider Complainant's assertion that VVWD will use banked water for purposes other than HDPP's water banking program. Complainant raised the same issue during the certification proceeding and we adopted Conditions 17 and 19 (see below) to address this concern. Complainant cannot now argue either that the ASRA allows HDPP to violate the Conditions or that VVWD will cause HDPP to violate the Conditions. This is a speculative argument that is wholly unsupported by the record. (See Commission Decision at pp. 225-226.) We find HDPP has complied with Condition 17(1). The allegations in the Complaint concerning Condition 17(1) are dismissed with prejudice.

#### Condition 19

Condition 19 provides that HDPP shall limit any use of its water treatment facilities by the VVWD or another entity for purposes other than banking water for the HDPP. Further, HDPP shall not allow VVWD or another entity to use the treatment facilities for treatment of water that is injected and then recovered by VVWD unless the Mojave Water Agency (MWA) and the VVWD have entered a WSA agreement for which a California Environmental Quality Act (CEQA) review has been completed in accordance with MWA Ordinance 9. The verification

WSA described in Condition 19 does not exist. There is no indication that HDPP would fail to submit such a WSA if executed in the future. The allegations of noncompliance with Condition 19 are wholly speculative and not ripe for review. We therefore dismiss the allegations regarding Condition 19 without prejudice.

## **Allegations Concerning Noncompliance with Conditions 11 and 12**

### **Condition 11**

Condition 11 requires HDPP to submit an approved Waste Discharge Requirement (WDR) prior to the start of groundwater banking unless the Lahontan RWQCB waives the waste discharge requirement. The time for filing the WDR in the verification to the Condition is inconsistent with the language of the Condition. The verification requires a copy of the WDR within sixty days of the start of rough grading. To clarify the time for filing the WDR, the language of the Condition controls. The Commission adopted the Condition based upon the evidentiary record, which reflects consultation with the parties and the relevant water agencies. The verification is written primarily to enable Staff to track compliance with the Condition. We therefore revise the verification language to be consistent with the Condition as follows:

“Verification: The project owner shall submit a copy of the approved Waste Discharge Requirement [or a waiver of the Waste Discharge Requirement](#) from the Lahontan RWQCB to the CEC CPM [prior to the start of any groundwater banking](#)~~within sixty days of the start of rough grading.~~”

HDPP submitted to Lahontan RWQCB a Report of Waste Discharge (RWD) and Antidegradation Analysis in May 2001. HDPP provided supplemental information on June 20, 2001, June 29, 2001, and July 30, 2001, as well as a supplement to the Lahontan staff prepared a draft Conditional Waiver of WDR for the RWQCB’s

consideration.<sup>10</sup> **Proposed Condition 3.f. in the draft Conditional Waiver of WDR states that “[b]anking of SWP water in amounts larger than HDPP needs as described in the RWD (approximately 13,000-acre feet, plus 333-acre feet per year) is prohibited and necessitates a revised RWD.”** (Draft Conditional Waiver of Waste Discharge Requirements et al., Nov. 9, 2001, at p. 6.) **Those limits reflect the calculations established in Conditions of**

**Certification Soil & Water 4, 5, and 6.** We therefore find no new evidence that HDPP intends to use SWP water for purposes other than project needs.

The Lahontan staff relied on the Commission's CEQA review of the project in recommending the Conditional Waiver of WDR. Lahontan staff also prepared a draft CEQA addendum to address any potential environmental impacts of the groundwater banking proposal.<sup>11</sup> The draft CEQA addendum found that "HDPP's potential impacts to groundwater are insignificant." (Oct. 23, 2001, draft CEQA Addendum at p. 9.) The Lahontan RWQCB has scheduled a meeting in February 2002, to consider the Conditional Waiver of WDR.

We find that Respondent HDPP is currently in compliance with Condition 11. HDPP is in the process of obtaining a waiver of the WDR, which would fulfill the requirements of Condition 11. If the Lahontan RWQCB declines to grant the waiver, HDPP must submit an approved WDR prior to the start of groundwater banking. With our clarification of the verification deadlines for Condition 11, the time for submitting either the waiver or the WDR has not yet occurred. The without prejudice.

Condition 12

**Condition 12 requires HDPP to submit a water treatment and monitoring plan that specifies the type and characteristics of the treatment processes and identifies any waste streams and their disposal methods. The plan must include the proposed monitoring and reporting requirements identified in HDPP's Report of Waste Discharge (Bookman-Edmonston 1998d), which is part of the evidentiary record.**<sup>12</sup>

Condition 12 further requires that treatment of water prior to injection must be "to levels approaching background water quality levels of the receiving aquifer or shall meet drinking water standards, whichever is more protective."

The verification to Condition 12 requires submittal of the water treatment plan ninety days prior to banking SWP water.

**Complainant Ledford alleges that HDPP is not using the proper type of water treatment facilities, and that the proposed treatment will not result in water approaching background water quality levels. Specifically, Complainant contends that Condition 12 requires reverse osmosis (RO) as**

the method to treat SWP water prior to injection. Although HDPP discussed RO during the certification proceeding, neither the Commission Decision nor Condition 12 requires the implementation of a specific design for water treatment. Rather, Condition 12 establishes a performance approach that must meet certain water quality standards.

HDPP's final design drawings of its water supply facilities, which were filed on March 27, 2001, included RO as the water treatment method. (Exhibit L to Respondent's Answer.) Subsequently, HDPP revised the plans during the WDR review process. HDPP now proposes to use conventional water treatment methods (coagulation, sedimentation, and filtration) to remove total dissolved solids (TDS) and organic constituents from SWP water prior to injection. HDPP

The 1998 Report identified in Condition 12 was updated in HDPP's May 2001, Report of Waste Discharge and Antidegradation Analysis by Bookman-Edmonston (consultants to HDPP) and in subsequent supplements thereto. Lahontan's review of HDPP's water treatment plan includes the initial 1998 RWD and its supplements.

the VVWD, and the Energy Commission in the choice of this water treatment method. (See Exhibits P-W to Respondent's Answer.) The water agencies believe the ultrafiltration process is reliable in removing pathogens and will result in meeting both primary and secondary drinking water standards.

Complainant Ledford is specifically concerned that the TDS concentrations in the injected water would be about 50 percent above background levels in the aquifer near the injection wells. According to HDPP, water treatment would result in TDS levels averaging 248 mg/l, which is well below the secondary drinking water standard of 500 mg/l.<sup>13</sup> The Complainant contends this would not comply with the requirement of Condition 12 for water treatment to result in TDS levels approaching background water quality. The existing background level of TDS in the aquifer is estimated at 165 mg/l.

Commission staff asserts that the RO process was initially considered to achieve TDS levels equivalent to the groundwater in the injection area. However, little consideration was given to treatments that would disinfect the SWP water prior to injection. Although RO would reduce TDS concentrations to meet background levels, primary drinking water standards are the more important focus because they regulate constituents that have potential adverse health effects. (See Staff's Jan. 11, 2001, Position Statement, at pp. 7-8.) Secondary contaminant levels for

TDS constituents are not based on risk to human health or the environment, but

rather on aesthetic concerns such as odor and taste.

The proposed findings for the Conditional Waiver of Waste Discharge Requirements address Mr. Ledford's concerns regarding increased TDS levels in the aquifer near the injection wells. (See Exhibit V to Respondent's Answer.) Proposed findings 8c and 8d are particularly relevant to our present inquiry.

Finding 8c: The water quality changes will not result in water quality less than prescribed in the Basin Plan because the injected SWP water will meet all California Code Regulations, Title 22 Drinking Water Standards and Basin Plan Objectives. Further, the resulting groundwater after 30 years of mixing will have a TDS concentration of

See Exhibit P to Respondent's Answer: Report of Waste Discharge at § 7.

Finding 8d: The project is consistent with the use of best practicable treatment or control to avoid pollution or nuisance and maintain the highest water quality consistent with maximum benefit to the people of the state because the additional costs associated with using reverse osmosis technology are not warranted when considering the degree of treatment provided with ultrafiltration. (Proposed Conditional Waiver at p. 3.)

**The language of Condition 12 is ambiguous. Complainant argues that HDPP's water treatment method should result in levels not exceeding background water quality levels for TDS and that any degradation of the aquifer (changing TDS levels) would violate the Condition. Respondent offers a different interpretation, claiming that levels of TDS may exceed the background levels if the long-term effect does not violate state drinking water standards. Staff seems to argue that** even if TDS levels exceed background levels, the primary concern is prevention of adverse health effects. We look at the directive in the context of the disjunctive statement in Condition 12, i.e., **water treatment must attain "levels approaching background water quality levels... or shall meet drinking water standards, whichever is more protective."** To clarify this requirement, we find the essential question is whether maintaining the existing TDS levels or meeting drinking water standards is "more protective of public health." **Complainant's interpretation also has merit since the sentence could be read as "more protective of existing TDS levels."** We believe, however, that the issue has been resolved under both interpretations. The

CEQA addendum prepared by the Lahontan staff concludes that over the life of the project:

There will be no measurable change in TDS concentrations in the Regional aquifer at the closest drinking water wells (VVWD Well Nos. 21 and 27). Increased TDS concentrations in the Regional Aquifer will thus create little or no change in the background water quality of the Mojave River or the Mojave River alluvial aquifer. The ultimate level of degradation, 30 mg/l TDS above pre-project conditions, is not significant. (Nov. 21, 2001, CEQA Addendum at p. 7.)

The Lahontan staff found that the treated water meets or exceeds Title 22 drinking water standards, which are deemed health protective. The state's regulatory scheme for drinking water standards establishes the "more protective" result. The responsible water agencies have indicated that the proposed water treatment method will meet both primary and secondary drinking water standards. We accept their findings.

The time for filing the water treatment and monitoring plan has not yet occurred; however, HDPP has already submitted its proposed plan and consulted with the appropriate water agencies as described above. The plan must reflect any requirements imposed by the Lahontan RWQCB as directed in the verification. There is no indication that HDPP will fail to comply with the requirements of Condition 12. We therefore dismiss the allegations regarding noncompliance with Condition 12 without prejudice.

### **Complainant's Discovery Requests**

On December 20, 2001, Complainant filed several requests for subpoenas to compel witnesses to attend the evidentiary hearing scheduled in this matter. On December 28, 2001, Complainant filed an "Ex Parte (sic) Motion to Show Cause..." to compel Commission staff to provide documents, which Staff had removed from compliance files on grounds of privilege.

The Committee did not have enough information to rule on the subpoena requests or the motion, which were submitted prior to the deadlines for receipt of Respondent's Answer and the parties' Position Statements. At the Prehearing Conference on January 14, 2002, the Committee canceled the evidentiary hearing and subsequently dismissed several of the allegations in the Complaint. (See Jan. 14, 2002, Committee Ruling on the Pleadings.) Since we uphold the



Committee's ruling and dismiss all the allegations in the Complaint, the subpoena requests are moot and we need not consider them.

We note, however, that Complainant wished to subpoena staff from the responsible water agencies, including the Lahontan RWQCB, the VVWD, the Mojave Water Agency, the City of Victorville, and technical staff from the Energy Alquist Act<sup>15</sup> contemplates that the responsible governmental agencies will provide relevant information to the Commission in a cooperative manner. They have done so. Moreover, we rely on the official documents, reports, and recommendations of the agencies, not their staffs' notes or preliminary opinions. With respect to the request to subpoena a Commission staff member, we would direct any staff member to attend evidentiary hearings if we believed such attendance was necessary and relevant. In this case, it is not.<sup>16</sup>

Complainant Ledford exercised his right to file Public Records Act (PRA)<sup>17</sup> requests with each of the water agencies identified in his subpoenas. We have no authority to mediate any dispute that Complainant may have with those agencies concerning his PRA requests.

Complainant also filed a PRA request with Energy Commission staff for documents in the compliance files. Staff provided documents as requested except for certain documents deemed privileged by staff attorneys. In his Motion to Show Cause, Complainant argues that the public interest requires disclosure of those documents. Staff contends that the redacted documents are protected from disclosure either by attorney-client privilege or deliberative process privilege, which protects internal communications, notes, and other evidence of the agency decision-making process. Resolution of any remaining issues related to that dispute shall be determined in accordance with the procedures set forth in Section 2501 et seq. of the Commission's regulations. (Cal. Code of Regs., tit.

1 HDPP's water supply pipelines and water treatment facilities are properly sized to meet only project needs.

2 The Aquifer Storage and Recovery Agreement is in effect and prohibits HDPP from allowing additional water to be treated by the project's water treatment facilities for non-HDPP purposes.

3 Complainant's allegations concerning noncompliance with Conditions Soil and Water 1e and 17(1) are erroneous and unsupported by the record.

4 HDPP has complied with Conditions Soil and Water 1e and 17(1).

5 Complainant's allegations concerning noncompliance with Conditions Soil and Water 2, 11, 13, and 19 are speculative and not ripe for review.

6 HDPP's request for a Conditional Waiver of Waste Discharge Requirements is currently pending before the Lahontan RWQCB.

7 In conjunction with the Conditional Waiver process, the Lahontan RWQCB reviewed HDPP's Degradation Analysis and prepared a CEQA Addendum, which concludes that HDPP will not cause significant adverse environmental impacts to groundwater.

8 An approved Conditional Waiver of Waste Discharge Requirements by the Lahontan RWQCB will satisfy the requirements of Conditions of Certification Soil & Water 11 and 12.

**9 HDPP's water treatment facilities will produce water that exceeds certain TDS levels in the receiving aquifer but does not violate the state's Title 22 primary and secondary drinking water standards.**

10 HDPP has filed all the required compliance documents currently due under the Conditions of Certification Soil & Water 1e, 2, 11, 12, 13, 17(1), and 19

11 Complainant's proposed testimony and exhibits do not establish prima facie evidence of noncompliance with the Conditions of Certification.

12 Complainant's subpoena requests are moot.

The allegations regarding noncompliance with Conditions of Certification Soil & Water 2, 11, 12, 13, and 19 are dismissed without prejudice.

The allegations regarding noncompliance with Conditions of Certification Soil & Water 1e and 17(1) are dismissed with prejudice.

The Complaint is dismissed in its entirety.

Complainant's discovery requests are denied.

Dated January 29, 2002, at Sacramento, California.

-original signed by-

ROBERT A. LAURIE Commissioner and Presiding Member High Desert  
Complaint Committee

-original signed by-

ROBERT PERNELL Commissioner and Associate Member High Desert  
Complaint Committee